

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: December 27, 2001, 16:55:45 ; Search time 427.16 Seconds
(without alignments) updates/sec
5579.558 Million cell

Title: US-09-830-647-3

Perfect score: 2780
Sequence: 1 aattcgccgcgcgcgtctctg.....aaaaaaaaaaactcgag 2780

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

Total number of hits satisfying chosen parameters: 1861242

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

N.Geneseq_1101.*
1: /SIDS2/gcgdata/geneseq/geneseqn/NA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn/NA1981.DAT:*
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9: /SIDS2/gcgdata/geneseq/geneseqn/NA1988.DAT:*
10: /SIDS2/gcgdata/geneseq/geneseqn/NA1989.DAT:*
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22: /SIDS2/gcgdata/geneseq/geneseqn/NA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2780	100.0	2780	21	Human H37 nucleoti
2	2768	99.6	6712	21	Human ORFX ORF2246
3	2648	95.3	2719	21	Human H37 nucleoti
4	1194.2	43.0	1915	22	Probe #3680 for ge
5	1194.2	43.0	1915	22	Probe #3618 used t
6	1101.6	39.6	2276	22	Human cDNA sequenc
7	965	34.7	1031	22	Probe #12901 for g
8	965	34.7	1031	22	Probe #8625 used t
9	721.6	26.0	903	22	Human cDNA clone (
10	513.8	18.5	685	22	Novel human polynu
11	411	14.8	422	22	Novel human polynu

12	384.4	13.8	403	22	AAF64912
13	294.6	10.6	318	21	AAA43876
14	211.4	7.6	397	22	AAF64832
15	184.2	6.6	468	22	AAI16129
16	184.2	6.6	201	22	AAI38399
17	183.2	6.6	201	22	AAI25319
18	183.2	6.6	201	22	AAI51493
19	182.2	6.6	416	22	AAI37857
20	178.2	6.4	449	22	AAI15475
21	178.2	6.4	449	22	AAI36863
22	176.8	6.4	936	22	AAF58252
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33	176.2	6.3	938	22	AAF58255
34	175.8	6.3	180	16	AAT25803
35	165	5.9	165	22	AAI57140
36	149	5.4	149	22	AAI24703
37	149	5.4	149	22	AAI50060
38	124	4.5	195	21	AAI04338
39	99.4	3.6	377	22	AAF65378
40	72	2.6	244	22	AAF58238
41	70.4	2.5	244	22	AAF58238
42	54.8	2.0	12001	16	AAO76213
43	53	1.9	114793	22	AAO08215
44	52.4	1.9	3198	20	AAI02974
45	52	1.9	2188	20	AAZ77506

ALIGNMENTS

RESULT 1
ID AAA53483 standard; cDNA; 2780 BP.
AC AAA53483;
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04-OCT-2000 (first entry)
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XX Human H37 nucleotide sequence #1.
DE
XX H37; human; Cdc7 regulatory subunit; cytosolic; proliferative; cancer;
KW anti-proliferative; replication regulator; stem cell; gs.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FT CDS 518..2542
FT FT /*tag= a
FT /product= "H37"
XX
XX PN WO200026250-A1.
XX
XX PD 11-MAY-2000.
XX
XX PF 01-NOV-1999; 99WO-JP06076.
XX
XX PR 30-OCT-1998; 98JP-0311408.
XX
XX PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.
XX (ARAI/) ARAI K.
XX (MASA/) MASAI H.
XX
XX PI Arai K, Masai H;
XX


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|||||
Db 1801 gaaatgtgataaattgtcattgttaagtaagctgaagatgacataagcagaattt 1860
OY 1861 tacacagctacactacataaataaacaacaggaatgcattcttgcacatttcgaacac 1920
Db 1861 tacacagctacactacataaataaacaacaggaatgcattcttgcacatttcgaacac 1920
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Db 1921 attaagtgataaataagcttagaagaactaaggtagatcactataatgttaacatacagc 1980
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Db 2761 aaaaaaaaaaactcgag 2780

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RESULT 2
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 ID AAC76691 standard; cDNA; 6712 BP.
 XX
 AC AAC76691;

XX 08-FEB-2001 (first entry)
 DT Human ORFX ORF2246 polynucleotide sequence SEQ ID NO:4491.
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 XX
 DE Human; open reading frame; ORFX; detection; cytosolic; hepatotropic;
 KW vlneryary; antipariatic; antiparkinsonian; nootropic; neuroprotective;
 KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
 KW immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
 KW hypotensive; dermatological; immunosuppressive; antineoplastic;
 KW antiviral; antibacterial; antifungal; antineumatic; antihypertensive;
 KW antineumatic; gene therapy; cancer; proliferative disorder; hypertension;
 KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
 KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
 KW cholesterol ester storage; systemic lupus erythematosus; infection;
 KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
 KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
 KW bone damage; cartilage damage; antineoplastic disease; coagulation;
 KW thrombosis; contraceptive; ss.
 KW
 OS Homo sapiens.
 PN WO200058473-A2.
 XX
 XX 05-OCT-2000.
 PD
 XX
 XX 31-MAR-2000; 2000MO-US08621.
 PE
 XX
 XX 31-MAR-1999; 99US-0127607.
 PR 02-APR-1999; 99US-0127636.
 PR 05-APR-1999; 99US-0127728.
 PR 30-MAR-2000; 2000US-0540763.
 XX
 XX (CUBA-) CUBAGEN CORP.
 PA
 XX
 XX Shinkets RA, Leach M;
 PI
 PI WPI: 2000-602362/57.
 DR P-PSDB: AAB42482.
 XX
 XX Novel nucleic acids and peptides derived from open reading frame X,
 PT useful for treating e.g. cancers, proliferative disorders,
 PT neurodegenerative disorders and cardiovascular disease -
 PT
 PS Claim 5; Page 3671-3675; 5507PP; English.
 PS
 XX
 XX AAC74446 to AAC7606 encode the proteins given in AAB40237 to AAB43397,
 CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
 CC sequences have activities such as: cytostatic; hepatotropic; vlneryary;
 CC antipariatic; antiparkinsonian; nootropic; neuroprotective;
 CC osteopathic; anticonvulsant; antiarthritic; immunosuppressant;
 CC immunostimulant; cardiant; thrombolytic; coagulant; vasotropic;
 CC antidiabetic; hypotensive; dermatological; immunosuppressive;
 CC antineoplastic; antineumatic; antiviral; antifungal; antineumatic;
 CC antihypertensive. The sequences can be used for determining
 CC the presence of or predisposition to or preventing or treating
 CC pathological conditions associated with an ORFX-associated disorder. The
 CC nucleic acids can be used to express ORFX proteins in gene therapy
 CC vectors. The proteins and nucleic acids may be used to treat cancers,
 CC proliferative disorders, neurodegenerative disorders, osteoarthritis,
 CC graft vs host disease, cardiovascular disease, diabetes mellitus,
 CC hypertension, hypothyroidism, cholesterol ester storage, systemic lupus
 CC erythematosus, severe combined immunodeficiency (SCID), AIDS, viral,
 CC bacterial or fungal infection, malaria, autoimmune disorders, asthma,
 CC allergies, aplastic anaemia, burns, wounds, bone and cartilage damage,
 CC nocturnal haemoglobinuria, antineoplastic disease; to enhance
 CC coagulation; to inhibit thrombosis; and as a contraceptive.
 CC
 XX
 SQ Sequence 6712 BP; 2319 A; 1206 C; 1244 G; 1942 T; 1 other;

Query Match 99.6%; Score 2768; DB 21; Length 6712;
 Best Local Similarity 99.8%; Pred. No. 0;

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OY	65	gagactcgaagagacacacagaaatgagtcgggttgagagcggaacacacacgcctcgacggcc	124						
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OY	125	agagcgaagcgcgagaaagagacggcggtctgaaggggcgggcgcgcgacgcgcgagagagca	184						
DB	4057	agagcgaagcgcgagaaagagacggcggtctgaaggggcgggcgcgcgacgcgcgagagagca	4116						
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DB	4117	ggacacgaagggc	4176						
OY	245	cgcatacggccgc	304						
DB	4177	cgcatacggccgc	4236						
OY	305	cttgctgccttgcccttcctccctccgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc	364						
DB	4237	cttgctgccttgcccttcctccctccgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc	4296						
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 AC AAA53484;
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 DT 04-OCT-2000 (first entry)
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 DE Human H37 nucleotide sequence #2.
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 XX H37, human; Cdc7 regulatory subunit; cytosolic; proliferative; cancer;
 XX anti-proliferative; replication regulator; stem cell; ss.
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 XX FT 518..1222
 XX CDS /tag="a
 XX /product="H37"
 XX
 PD WO200026250-A1.
 XX
 PD 11-MAY-2000.
 XX
 PF 01-NOV-1999; 99WO-JP06076.
 XX
 PR 30-OCT-1998; 98JP-0311408.
 XX

PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.
 PA (ARAI/) ARAI K.
 PA (MASA/) MASA H.
 XX
 PI Arai K, Masai H;
 XX
 DR WPI: 2000-365580/31.
 DR P-PSDB: AAR03759.
 XX
 PS Claim 7; page 49-51; 55pp; Japanese.
 XX
 CC The present sequence represents a human H37 encoding nucleotide sequence.
 CC H37 is a protein with a Cdc7 activity regulatory subunit. The invention
 CC relates to two H37 protein and nucleotide sequences. H37 proteins exhibit
 CC cytosolic, proliferative, anti-proliferative, and cell replication
 CC regulatory activities. The proteins, encoded genes and DNA fragments are
 CC useful in treating cancers and other diseases resulting from abnormal
 CC production of stem cells. Antibodies directed against one of the H37
 CC proteins can be used to inhibit cell proliferation.
 XX
 SO Sequence 2719 BP; 932 A; 522 C; 607 G; 658 T; 0 other:
 Query Match 95.3%; Score 2648; DB 21; Length 2719;
 Best Local Similarity 97.8%; Pred. No. 0;
 Matches 2719; Conservative 0; Mismatches 0; Indels 61; Gaps 1;
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 |||||||
 Db 1 aattcgacagagactctctgaggtctgcccagaactggaagcggcgagagcccg 60
 |||||||
 QY 61 gtctgagactgagagagcaacggaatgtagcgcggttagagcggaacacacactcgag 120
 |||||||
 Db 61 gtctgagactgagagagcaacggaatgtagcgcggttagagcggaacacacactcgag 120
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 QY 121 ggcacagcgagcgcgagagagagcgcgcggtgagggcgggcgcgagcgagaa 180
 |||||||
 Db 121 ggcacagcgagcgcgagagagagcgcgcggtgagggcgggcgcgagcgagaa 180
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 QY 181 ggcagcgacagagggcgagcgagcgcggtgagggcgggcgcgagcgagaa 240
 |||||||
 Db 181 ggcagcgacagagggcgagcgagcgcggtgagggcgggcgcgagcgagaa 240
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 QY 241 cggcgctacgcggcgcgcgcggtgagcggttccaacttcaacccgcgacccca 300
 |||||||
 Db 241 cggcgctacgcggcgcgcgcggtgagcggttccaacttcaacccgcgacccca 300
 |||||||
 QY 301 ctccgttgccttgcgacttccctcctcgcggttgcgagccgcgcgcgcgaac 360
 |||||||
 Db 301 ctccgttgccttgcgacttccctcctcgcggttgcgagccgcgcgcgcgaac 360
 |||||||
 QY 361 ccgacttcgaagcggtacttacttgcgttagagccgttagtcggaagagagag 420
 |||||||
 Db 361 ccgacttcgaagcggtacttacttgcgttagagccgttagtcggaagagagag 420
 |||||||
 QY 421 cggcgctcctgtcaacagcgcggggaaagcgtgttccgcgctcccggtcgagact 480
 |||||||
 Db 421 cggcgctcctgtcaacagcgcggggaaagcgtgttccgcgctcccggtcgagact 480
 |||||||
 QY 481 ttctccgagcccaagcattgtagtgcgcggcgagctgcagtaactccgcgcgaatgagat 540
 |||||||
 Db 481 ttctccgagcccaagcattgtagtgcgcggcgagctgcagtaactccgcgcgaatgagat 540
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 QY 541 ccacagtaagagcatttccaggtggaatcccaagtcaaaaatgaaataaacagacac 600
 |||||||
 Db 541 ccacagtaagagcatttccaggtggaatcccaagtcaaaaatgaaataaacagacac 600
 |||||||
 QY 601 tctgaatctcgaataactgataacagggccagaataatccaaatgtcaacacttgggg 660
 |||||||

Db 601 tctgaatctctgaaacgtaatacagccagaaaatcccaatgtaagccattggg 660
 QY 661 aaaagatttacccttgacttacctctgtacacatctcggaaaacttcaaaagacat 720
 Db 661 aaaagatttacccttgacttacctctgtacacatctcggaaaacttcaaaagacat 720
 QY 721 taagagatctggagggcgagctggaagaattcttcaagcaagatacgaatcttattc 780
 Db 721 taagagatctggagggcgagctggaagaattcttcaagcaagatacgaatcttattc 780
 QY 781 aaataagaagaagaaatcttgcacaaaccttgggtcggaattcttctctgtaaccaagttcc 840
 Db 781 aaataagaagaagaaatcttgcacaaaccttgggtcggaattcttctctgtaaccaagttcc 840
 QY 841 agaatctgcatatactgacgaanaaccacttccactccatccagccatgataggaattcatt 900
 Db 841 agaatctgcatatactgacgaanaaccacttccactccatccagccatgataggaattcatt 900
 QY 901 taagtcaccagacacagctggtttaaagcagaagaataattatgattgtaaaaagctatcaa 960
 Db 901 taagtcaccagacacagctggtttaaagcagaagaataattatgattgtaaaaagctatcaa 960
 QY 961 ggaacatgatttatttcccttcaaatgataattatcaaatgcttgcattgagggagtaaa 1020
 Db 961 ggaacatgatttatttcccttcaaatgataattatcaaatgcttgcattgagggagtaaa 1020
 QY 1021 aattcttcatatgatacacttgaatatacattggaacaaagaagaaagagttgattt 1080
 Db 1021 aattcttcatatgatacacttgaatatacattggaacaaagaagaaagagttgattt 1080
 QY 1081 acttcttcatatgatacacttgaatatacattggaacaaagaagaaagagttgattt 1080
 Db 1081 acttcttcatatgatacacttgaatatacattggaacaaagaagaaagagttgattt 1080
 QY 1081 acttcttcatatgatacacttgaatatacattggaacaaagaagaaagagttgattt 1080
 Db 1081 acttcttcatatgatacacttgaatatacattggaacaaagaagaaagagttgattt 1080
 QY 1141 aaaaacaaagaacaggaagacttcaaaaagccttctgtaaaaggtggaagatacgaagcaact 1200
 Db 1141 aaaaacaaagaacaggaagacttcaaaaagccttctgtaaaaggtggaagatacgaagcaact 1200
 QY 1201 ctatagcgcatcttctcctcagctcagcaatacgccttcttaataattatctatcagaa 1260
 Db 1198 -----na 1199
 QY 1261 ggcctgcagtcattctgattgtagacaaagccattgatacgaagaacaaatcgaagttaa 1320
 Db 1200 ggcctgcagtcattctgattgtagacaaagccattgatacgaagaacaaatcgaagttaa 1259
 QY 1321 actaagaatctcaaaacagatgagataagatgtagaaacctcaatcaactcgaattgaa 1380
 Db 1260 actaagaatctcaaaacagatgagataagatgtagaaacctcaatcaactcgaattgaa 1319
 QY 1381 agagaagaagaagaagaagatactgtgaaatggtgcttgcagagaagaatataagaatcttgaaac 1440
 Db 1320 agagaagaagaagaagaagatactgtgaaatggtgcttgcagagaagaatataagaatcttgaaac 1379
 QY 1441 tcaactcttaagtgagcaacacagaacttgcacagaagtaaccagatcatcaagtgtgtga 1500
 Db 1380 tcaactcttaagtgagcaacacagaacttgcacagaagtaaccagatcatcaagtgtgtga 1439
 QY 1501 tgaatactgatactgaattgatttctgacttctggaatatagaanaagacacacttaanaa 1560
 Db 1440 tgaatactgatactgaattgatttctgacttctggaatatagaanaagacacacttaanaa 1499
 QY 1561 gaaagaagaataaatacagatgttgatcccttctcctgttcttctcgaagtctccgtaanaa 1620
 Db 1500 gaaagaagaataaatacagatgttgatcccttctcctgttcttctcgaagtctccgtaanaa 1559
 QY 1621 gacgtaagaagaagaagaagaatggaatctgacaataattctcagaagaatctgcaagaaga 1680
 Db 1560 gacgtaagaagaagaagaagaatggaatctgacaataattctcagaagaatctgcaagaaga 1619
 QY 1681 tgaatacaacagtgagaagcagaatcttctgtatataagaagccagaagaacatgtaaaaaa 1740
 Db 1620 tgaatacaacagtgagaagcagaatcttctgtatataagaagccagaagaacatgtaaaaaa 1679

QY 1741 gctcgtgtattcttagagcccatcccccacttcaaaatgtaattgagaaggcttaatga 1800
 Db 1680 gctcgtgtattcttagagcccatcccccacttcaaaatgtaattgagaaggcttaatga 1739
 QY 1801 gaaagagatataatatttccatgataagtagacatgagaatgacataagaacgaattt 1860
 Db 1740 gaaagagatataatatttccatgataagtagacatgagaatgacataagaacgaattt 1799
 QY 1861 taacagcttaccttaccataaanaacaaacggaaatgcattcttggacatttccgaaacgac 1920
 Db 1800 taacagcttaccttaccataaanaacaaacggaaatgcattcttggacatttccgaaacgac 1859
 QY 1921 attaatgaaatgacttagaagaactaaggtagatcacatlaaaytlaacatacagc 1980
 Db 1860 attaatgaaatgacttagaagaactaaggtagatcacatlaaaytlaacatacagc 1919
 QY 1981 atctgtaacatgatttctgatttccagtaacagataatgagatctcaaccanaacagaagtc 2040
 Db 1920 atctgtaacatgatttctgatttccagtaacagataatgagatctcaaccanaacagaagtc 1979
 QY 2041 agatactgagcttcttccagaagaatctcaaggaagaaggaacttcaatatttacc 2100
 Db 1980 agatactgagcttcttccagaagaatctcaaggaagaaggaacttcaatatttacc 2039
 QY 2101 tcatgattctggtcgtatatacaataaacaagttccagaagcaccacttgcagagcaaa 2160
 Db 2040 tcatgattctggtcgtatatacaataaacaagttccagaagcaccacttgcagagcaaa 2099
 QY 2161 ggcctccattccacttccctcgaggaagcccaatggaattggaacttcaagaagatgagtag 2220
 Db 2100 ggcctccattccacttccctcgaggaagcccaatggaattggaacttcaagaagatgagtag 2159
 QY 2221 tttaacctctgtgtaaaatacatcgaaaagtgaaaatacatctagaagcaaaatagaaga 2280
 Db 2160 tttaacctctgtgtaaaatacatcgaaaagtgaaaatacatctagaagcaaaatagaaga 2219
 QY 2281 aaatctggaaccaaagtgatgaatttgataaagaagactgaatttatatacacaagaagaaa 2340
 Db 2220 aaatctggaaccaaagtgatgaatttgataaagaagactgaatttatatacacaagaagaaa 2279
 QY 2341 cagaattctgagttcacccggtacagttcttactagaacttgttccagactagtgaaagaa 2400
 Db 2280 cagaattctgagttcacccggtacagttcttactagaacttgttccagactagtgaaagaa 2339
 QY 2401 atcagaatttcttgggtttcacagaactacacagaagaagtgatatacgaatgttttga 2460
 Db 2340 atcagaatttcttgggtttcacagaactacacagaagaagtgatatacgaatgttttga 2399
 QY 2461 tatttgggaagaagaagaatctcagataatctgttaacagcgttttctcgtcccttcaac 2520
 Db 2400 tatttgggaagaagaagaatctcagataatctgttaacagcgttttctcgtcccttcaac 2459
 QY 2521 tttaacatttactgggttttgaattttaaanaatgcaacttcttcaagaagatagaagat 2580
 Db 2460 tttaacatttactgggttttgaattttaaanaatgcaacttcttcaagaagatagaagat 2519
 QY 2581 catatctctgaaatcttataaataatgtaagaatctttaggaatttttttcaacagcttc 2640
 Db 2520 catatctctgaaatcttataaataatgtaagaatctttaggaatttttttcaacagcttc 2579
 QY 2641 gtttaccagaccccaatgtaaatatataaanaataatatttgcatttcttcaagaatgtaa 2700
 Db 2580 gtttaccagaccccaatgtaaatatataaanaataatatttgcatttcttcaagaatgtaa 2639
 QY 2701 taactgttaagaanaaatatacagaataaacttgcagctgtctgttcttatacttaaaaaa 2760
 Db 2640 taactgttaagaanaaatatacagaataaacttgcagctgtctgttcttatacttaaaaaa 2699
 QY 2761 aaaaaaaaaaaactcgag 2780
 Db 2700 aaaaaaaaaaaactcgag 2719

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RESULT 4
AA113747/C
ID AA113747 standard; DNA; 1915 BP.
XX
AC AA113747;
XX
DT 12-OCT-2001 (first entry)
XX
DE Probe #3660 for gene expression analysis in human cervical cell sample.
XX
KW Probe; human; microarray; gene expression; cervical epithelial cell;
KW cervical cancer; ss.
XX
OS Homo sapiens.
XX
PN W0200157278-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00670.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488901/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for
PT analyzing gene expression in human cervical epithelial cells -
XX
PS Claim 25; SEQ ID NO 3660; 487bp; English.
XX
CC The present invention relates to human single exon nucleic acid probes
CC (SENP). The present sequence is one such probe. The SENPs are derived
CC from human Beta cells. The SENPs can be used to produce a single exon
CC microarray, which can be used for measuring human gene expression in a
CC sample derived from human cervical epithelial cells. By measuring gene
CC expression, the probes are therefore useful in grading and/or staging gene
CC of diseases of the cervix, notably cervical cancer.
CC Note: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 1915 BP; 608 A; 324 C; 280 G; 703 T; 0 other;

Query Match 43.0%; Score 1194.2; DB 22; Length 1915;
Best Local Similarity 99.7%; Pred. No. 5.2e-258;
Matches 1196; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1563 aagaataaataacagtggtgagtcaccttcctcgtttctgcaagtgccctgaataaga 1622
DB 1283 AAGAATTAATAATACAGTGTGTGATCCCTTCTCCTGTTTCTCGAAGTGCTCGAAAAAAGA 1224
OY 1623 ctgaacaaagaagaaatgtaattgcaacatattctcagaagaattgccaaggaagatg 1682
DB 1223 CTGAACAAAGAAGAAAGATGCAATGATTTCTCGAAGATGCTCGAAGATG 1164
OY 1683 atacaacagtgaagagagcaaatcttcctgtataaagagagcccaagaaactgaaaaaagc 1742
DB 1163 ATACAAACAGTGAAGAGCAGAAATTTCTGTATTAAGAGAGCCACGGAACCTGAAAAAAGC 1104
OY 1743 tccgtttattccaagagccatccccaccctcaaatgaattgaagagcctaagaga 1802
|||||
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DB 1103 TCCTGTTTATTTCAGAGCCCATCCCCACCCCTTCAATGATTTGAGGGCTTAATGACA 1044
OY 1803 aatagtaataaataatgltccatglttaagtaagctgaagaatgacataagaacgaattta 1862
DB 1043 AATAGTAATTAATGTTCCATGTTAAGTACAGCTCAAGTACATGAAGACATGAAGAAATTTTA 984
OY 1863 cagaactaccttaactaaataaacaacaggaatgcatcttcttaacttccggaacacact 1922
DB 983 CACAGCTACCTGTACATTAATAAACAAACAGAAATGCAATTTTGACATTTCCGAACACACAT 924
OY 1923 taagtgaatatgacttaagaagactaaggttagatcactataatgtaacatacaggcat 1982
DB 923 TAAGTGAATAATGACTTAGAAGAACTAAGGTTAGATCAGTAAATGATACATACAGGCAT 864
OY 1983 ctgtaaatgttctgaattcagtaacagataatagtgatcctaaccataaacaagaagtcag 2042
DB 863 CTTGACATGTTTCTGATTCAGTACAGATAATTAATGATGATCAGCAACCAAAACGAAGTCAG 804
OY 2043 ataccgtgtcttttcagagaaggaatctcaagaagaagacccttcaatatttactc 2102
DB 803 ATACTGTGCTTTTTCAGCAAGAGATCTCAGGAAAAAGGACCTTCATTAATATTACTTC 744
OY 2103 atgattctgtctgataaacaataaacaagltcaagaagcaccataactgttcagcaag 2162
DB 743 ATGATTCTGTGCTGATTAACAAATTAACAGTTCAACAGACCACTMACTGTCAGGCAAG 684
OY 2163 ctccattccatactcctcctctgaggaacccaatgaatgtaacttcaagaaatagatg 2222
DB 683 CTCATTTCCATCTCTCTCTGAGGAAACCAATGAATGTGACATTCAGATATGAGATAGT 624
OY 2223 taccttctgtgtaaaatacgtcgaagaagtgaaataatataatgaagaaatagaagaaga 2282
DB 623 TACCTTCTGTGTAATAATACATTCGAAAAAGTGAAATATATTAGACCAATAGAAAAAGAA 564
OY 2283 atctggaaccaaatgctgaatttgataaagaactgaatttatacacaagaagaataca 2342
DB 563 ATCTGGAACCAATGCTGATTTGATTAAGAAAGAACTGAATTTTACACAGAGAAAGAAACA 504
OY 2343 gaattgtagtcacccgtgacagctcttactagactgttctcagactagtgaaagaagaat 2402
DB 503 GAATTTGTAGTTCAACCGGTACAGCTCTTACTACTGTTTTCAGACTAGTGAAGAGAAAT 444
OY 2403 cagaatttttggttttcaaaagctcaacacagaagaagaagtggtatgcaatgttttaga 2462
DB 443 CGAATTTTGGGTTTCAACAAGCTACACAGAAAGAGTGATATGCAATGTTTAGATA 384
OY 2463 ttctggaagaagaaataatcagataatctgttaacaagcgttttctcgtccctcaact 2522
DB 383 TTTCGGAAGAGGAAATTCAGATTAATCTGTTAACAGCGTTTTCGTGTCCTTCACACTT 324
OY 2523 ctacattctggtcctttagaatttaaaaaatgcaactcttcaagaagtgaataagata 2582
DB 323 CTACATTTACTGGCTTTTGAATTTAAAAAATGCATACCTTTTCAGAAAGATGAAGATCA 264
OY 2583 tattcttgaataatttataataatataatgtaaatcttcttggaattttttccaagcttct 2642
DB 263 TATTTCTGAAATTTTATTAATAATGATGTAATTTCTTGGAATTTTATTCACAGCTTTCT 204
OY 2643 ttacaagcccaaatgtaaatatlaaataaataatcttgcgaatttctcaagaattgaata 2702
DB 203 TTACAGACCCCAATGTAATATTAAATAATTAATTTTTCGAATTTTCTACAGAAATGAATA 144
OY 2703 cctgttaagaanaaatlaacagaataaacttgtgactgtgtctgttttatacattaaaaaa 2761
DB 143 CCGTGTAAAGAAAAAATTTACAGATAAATCTTGACATGCGTCTGTTTACATTATATATA 85
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RESULT 5
AA103627/C
ID AA103627 standard; DNA; 1915 BP.
XX
AC AA103627;
XX
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DT 09-OCT-2001 (first entry)

XX Probe #3618 used to measure gene expression in human breast sample.

DE Probe: human; breast disease; breast cancer; development disorder; ss;

KW inflammatory disease; proliferative breast disease; non-carcinoma tumour.

XX Homo sapiens.

OS MO200157270-A2.

XX 09-AUG-2001.

XX 29-JAN-2001: 2001WO-US000661.

XX 04-FEB-2000: 2000US-0180312.

XX 26-MAY-2000: 2000US-0207456.

XX 30-JUN-2000: 2000US-0608408.

XX 03-AUG-2000: 2000US-0632365.

XX 21-SEP-2000: 2000US-0234687.

XX 27-SEP-2000: 2000US-0236359.

XX 04-OCT-2000: 2000GB-0024263.

XX (MOLE-) MOLECULAR DYNAMICS INC.

XX Penn SG, Hanzel DK, Chen W, Rank DR;

PI WPI: 2001-476286/51.

XX Novel single exon nucleic acid probe used to measuring gene expression

XX in a human breast -

XX Claim 25: SEQ ID NO 3618; 322bp; English.

XX The present invention relates to novel single exon nucleic acid probes.

XX The present sequence is one such probe. The probes are useful for

XX measuring human gene expression in a human breast sample, where the probe

XX hybridizes at high stringency to a nucleic acid expressed in the human

XX breast. The probes are useful for predicting, diagnosing, grading,

XX staging, monitoring and prognosing diseases of the human breast,

XX particularly those diseases with polygenic aetiology. The diseases

XX include: breast cancer, disorders of development, inflammatory diseases

XX of the breast, fibrocystic changes, proliferative breast disease and

XX non-carcinoma tumours.

XX Note: The sequence data for this patent did not form part of the printed

XX specification, but was obtained in electronic format directly from WIPO

XX at http://wipo.int/pub/published_pcl_sequences.

XX Sequence 1915 BP: 608 A; 324 C; 280 G; 703 T; 0 other:

SO

Query Match 43.0%; Score 1194.2; DB 22; Length 1915;

Best Local Similarity 99.7%; Pred. No. 5.2e-258;

Matches 1196; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

1563 aagaataaatacagtgatcccttcctctgcttctcgaagtgcctgaagaaga 1622

DB 1283 AAAAATAAATACATGTTGGATCCCTTCTCCTGTTCTGCAATGTCGAAAAAGA 1224

QY 1623 ctgaacaaaggaagaagtgatgcacatatcttcgaagaagttccaggaagatg 1682

DB 1223 CTGANCAAAAAGAAAAGTGAATTCGACATATTTCTGAAAAGTTGCCAGAAATG 1164

QY 1683 atacaacagtgaaagggcgaattcctgataaagagaccggaagaattgaagaagaagc 1742

DB 1163 ATACACAGTGAAAGAGCAGAAATTTCTGTTAAGAGACCCAGAAATGAAAAAAGC 1104

QY 1743 tcccttattatcagaagccatcccaaccctcaatgaattgaagggcttaatgaga 1802

DB 1103 TCCTGTTATTTAGAGCCCATCCCACTTCAAAATGAAATGAGAGGCTTAATGAGA 1044

QY 1803 aatgaagtaaatgttccatgttaagtaagctgaagatgacataagacagaattta 1862

DB 1043 AAATGAGTAATAATGTTCCATGTTAAGTACAGCTGAAGATGACATGAAGACAAATTTTA 984

QY 1863 cacaagctacccttacataaataaacaagaatgcattcttgacattccgaacacacat 1922

DB 983 CACAGCTACTCTTACATTAATAAACAAGAAATGCAATTTCTGCAATTTCCGACACACAT 924

QY 1923 taagtgaataaactgaagaagaactaagggtatgacataataatgatacagaagcatt 1982

DB 923 TAACTGAAATGACTTAGAGAGACTAAGGGTAACTCATTAATGTAACATFACAGGCAT 864

QY 1983 ctgtacatglttcgtgattcagtaacagataagtgatgctcaaccanaaagaagtcag 2042

DB 863 CTGTACATGTTTCTGATTTTCAGTACAGTAATAGTGAATCTCACCAAAACAGAGGTCAG 804

QY 2043 aatactgacttttccagaagaagatctcaagaagaagaagaccttcaatcaatttaetctc 2102

DB 803 ATACTGCTGTTTTCAGCAAGATCTCAAGGAAAAAGACCTTCATTTCAATTTTACTCTC 744

QY 2103 atgagtlctggtcgtatacaataaacaagttcacagaagacacttaactgtltaaggcaaaag 2162

DB 743 ATGATTTCTGGTCTGATTAACAATAAACAGTTCCACAAGACACCTTAAGTTCAGCAAAAG 684

QY 2163 ctccatcccaactcctcctctgaggaaccgaatgaaatgacttcaagaataatgatagtt 2222

DB 683 CTCATTTCCATCTCTCTCTGAGAAACCAATGAAATGTGACTTCAAGAAATGATGATGTT 624

QY 2223 taacctctgttaaaatacaatcgaagaagaagaataatataatagaagcaaaatagaagaagaa 2282

DB 623 TACCTTCTGTAATAATACATCCAAAAGTGCAAAATTAATTTAGAGCAAAATGAAAAAGAA 564

QY 2283 atcttgaaaccaaatgctgtaactgtgataaagaactgaatttatcaacaagaagaagaaga 2342

DB 563 ATCTGGAACCAAAATGCTGAATTTGATTAAGAAAGAACTGAATTTTACACAAAGAAAAACA 504

QY 2343 gaatttgatgttaaccggtacagtccttactagactgttccagactagtgagaagaat 2402

DB 503 GAATTTGTAGTTCACGCGTACAGTCTTTACTAGACTGTTTCAGACTTACTGAAAGAAAT 444

QY 2403 cagaatttttggtttcaacaagctacacagaagaagaagtgatataatgataatgattagata 2462

DB 443 CAGAAATTTGGGTTTACACAGCTACACAGAAAGAGTGTATATGCAATGTTTAAAGATA 384

QY 2463 ttgtgaaagaaagaataatcaagataatcgttaacaagcgttttctctgctccctcaact 2522

DB 383 TTTGGAGAGGAAATTAATGATATCTGTAAACAGCGTWTTCCTGCTCCCTCAACTT 324

QY 2523 ctacatttactggttttagaatttaaaaaaatgatacttccagaagtgataagacaa 2582

DB 323 CTACATTTACTGCTTTTAAATTTAAAAATGCAATCTTTCAGAAAGTATAGAGATCA 264

QY 2583 tatcttcaaattttataataatgataatgataatcttaagaatttttttcaagcgttctg 2642

DB 263 TATTTCTTAATAATTTTAAATATGATGAAATTTCTAGATTTTTCACGCTTGT 204

QY 2643 ctacagaccacaatgataataataaataatatttgcatttccagaagaattgagata 2702

DB 203 TTACAGACCCAAAAGTAAATATTAATAAATAATATTTTCATTTTTCACGAATTGATA 144

QY 2703 cctgtttaaagaataatcaagaataactgtgactggtctgtgtttaaataaataaataa 2761

DB 143 CCGTGTAAAGAAAATTTACAGAAATTTGACCTGGCTTGTGTTTACATTTATATATA 85

RESULT 6

AAH17747

ID AAH17747 standard; cDNA: 2276 BP.

XX AAH17747;

AC 26-JUN-2001 (first entry)

XX Human cDNA sequence SEQ ID NO:17368.

KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX Homo sapiens.
OS
XX EP1074617-A2.
FN
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-0116126.
XX
PR 29-JUL-1999; 99JP-0248036.
XX 27-AUG-1999; 99JP-0300253.
PR 11-JAN-2000; 2000JP-0118776.
PR 02-MAY-2000; 2000JP-0183767.
PR 09-JUN-2000; 2000JP-0241899.
XX
PA (HELI-) HELIX RES INST.
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX WPI: 2001-318749/34.
XX
XX Primer sets for synthesizing polynucleotides, particularly the 5602
PT full-length cDNAs defined in the specification, and for the detection
PT and/or diagnosis of the abnormality of the proteins encoded by the
PT full-length cDNAs -
XX
XX Claim 8; SEQ ID 17368; 2537bp + CD ROM; English.
XX
XX The present invention describes primer sets for synthesizing 5602
CC full-length cDNAs defined in the specification, where a primer set
CC comprises: (a) an oligo-dr primer and an oligonucleotide complementary
CC to the complementary strand of a polynucleotide which comprises one of
CC the 5602 nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in
CC the specification. The primer sets can be used in antisense therapy and
CC in gene therapy. The primers are useful for synthesizing polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialized methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAH92446 to
CC AAH95893 represent human amino acid sequences; and AAH13629 to AAH13632
CC represent oligonucleotides, all of which are used in the exemplification
CC of the present invention.
XX
SQ Sequence 2276 BP; 793 A; 381 C; 421 G; 681 T; 0 other:

Query Match 39.6%; Score 1101.6; DB 22; Length 2276;
Best Local Similarity 99.6%; Pred. No. 3.2e-237;
Matches 1104; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1654 tatctctcaagaagtccaggaagatgatacaacagtgaagagcgcaattctctgta 1713
DB 1 tatctctcaagaagtccaggaagatgatacaacagtgaagagcgcaattctctgta 60
QY 1714 taaagagcccaagaaactgaaaaaagctctgttatttcaagagccatcccccacc 1773
DB 61 taaagagcccaagaaactgaaaaaagctctgttatttcaagagccatcccccacc 120
QY 1774 ttcaaatgaattgagagggcttaattgagaaaaatgagtaataaagtcttcattgaagtaac 1833
DB 121 ttcaaatgaattgagagggcttaattgagaaaaatgagtaataaagtcttcattgaagtaac 180
QY 1834 agctgaagatgacataaagaacgaatttacaacagctactactcaataaaaaaacaagaga 1893

DB 181 agctgaagatgacataaagaacgaatttacaacagctactactcaataaaaaaacaagaga 240
QY 1894 atgcatctcttgcaattccgaaacacatlaagtgaanaatgactagaagaactaagggt 1953
DB 241 atgcatctcttgcaattccgaaacacatlaagtgaanaatgactagaagaactaagggt 300
QY 1954 agatacctaataatgnaatacagagcatctgaatggtttctgatttaagtaacagata 2013
DB 301 agatacctaataatgnaatacagagcatctgaatggtttctgatttaagtaacagata 360
QY 2014 tagtgatctcaacaaacagaagtcagataatcgtgtctttccagcaagaagatccaa 2073
DB 361 tagtgatctcaacaaacagaagtcagataatcgtgtctttccagcaagaagatccaa 420
QY 2074 ggaagaagaccttcattcaataattactcatgattctgtctgataacaataacagtc 2133
DB 421 ggaagaagaccttcattcaataattactcatgattctgtctgataacaataacagtc 480
QY 2134 acaagagcccttaactgttcagagcaaggtccatctcattactcctccctgaggaaccaa 2193
DB 481 acaagagcccttaactgttcagagcaaggtccatctcattactcctccctgaggaaccaa 540
QY 2194 tgaatgacttcaagaagatgataatgataatcctctgtgttaaaatcacagaaagtga 2253
DB 541 tgaatgacttcaagaagatgataatgataatcctctgtgttaaaatcacagaaagtga 600
QY 2254 aataatattagagcagaaatagaaaaaactggaaccaaatgctgaattgtataaag 2313
DB 601 aataatattagagcagaaatagaaaaaactggaaccaaatgctgaattgtataaag 660
QY 2314 aactgaattattacaagaagaagaagaattgttaattcaacggtaacgcttact 2373
DB 661 aactgaattattacaagaagaagaagaattgttaattcaacggtaacgcttact 720
QY 2374 agactgtttcagactagtgaaagagaacacgaatttgggtttcacaagctacacaga 2433
DB 721 agactgtttcagactagtgaaagagaacacgaatttgggtttcacaagctacacaga 780
QY 2434 aagaagtgtatagatgaatgttttagataattggagaagaggaanaattcagataatctgt 2493
DB 781 aagaagtgtatagatgaatgttttagataattggagaagaggaanaattcagataatctgt 840
QY 2494 aacagagtttctcgtccctccaactctacattactggttttaagaatttaaaaaa 2553
DB 841 aacagagtttctcgtccctccaactctacattactggttttaagaatttaaaaaa 900
QY 2554 tgcatactttcaagaagtgaataagatcatctctggaatttttaataatgataatga 2613
DB 901 tgcatactttcaagaagtgaataagatcatctctggaatttttaataatgataatga 960
QY 2614 aattcttagaatttttttccagctgtgttccagagcccaaatgtaataatlaaaaaata 2673
DB 961 aattcttagaatttttttccagctgtgttccagagcccaaatgtaataatlaaaaaata 1020
QY 2674 atatttgaatttttccaggaattgataacccgtttaaagaaaaaattacagaaataacttg 2733
DB 1021 atatttgaatttttccaggaattgataacccgtttaaagaaaaaattacagaaataacttg 1080
QY 2734 tgaatggtctgttttaacttaaaaaa 2761
DB 1081 tgaatggtctgttttaacttaataata 1108

RESULT 7
AA122968/C
ID AA122968 standard; DNA; 1031 BP.
XX
XX AA122968;
AC
XX
XX 12-OCT-2001 (first entry)
DT
XX
XX Probe #12901 for gene expression analysis in human cervical cell sample.

XX (MOLE-) MOLECULAR DYNAMICS INC.
 XX PA Penn SG, Hanzel DK, Chen W, Rank DR;
 XX WPI: 2001-476286/51.
 XX
 PT Novel single exon nucleic acid probe used to measuring gene expression
 in a human breast -
 PS Claim 25: SEQ ID No 8625; 322bp; English.
 XX
 CC The present invention relates to novel single exon nucleic acid probes.
 CC The present sequence is one such probe. The probes are useful for
 CC measuring human gene expression in a human breast sample, where the probe
 CC hybridizes at high stringency to a nucleic acid expressed in the human
 CC breast. The probes are useful for predicting, diagnosing, grading,
 CC staging, monitoring and prognosing diseases of the human breast,
 CC particularly those diseases with polygenic aetiology. The diseases
 CC include: breast cancer, disorders of development, inflammatory diseases
 CC of the breast, fibrocystic changes, proliferative breast disease and
 CC non-carcinoma tumours.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pcl_sequences.
 XX
 SQ Sequence 1031 BP; 290 A; 181 C; 180 G; 380 T; 0 other;

Query Match 34.7%; Score 965; DB 22; Length 1031;
 Best Local Similarity 100.0%; Pred. No. 9.3e-207;
 Matches 965; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1563 aaagaataaaalacagltgtgacgtcccttccctgttctgcaagtgccgtgaaaga 1622
 DB 965 AAAGATTAATAATACAGTGTGATCCCTTCCCTGTTCTGCAAGTGCCTGAAAGAA 906
 QY 1623 ctgaaacaaagaaagtggaatcgaacataattctcgaagaagtgcgaagaagt 1682
 DB 905 CTGAACAAAGAAAGAAATGGAATTCGCAATATTTCTCAGAAATGCCGAGAAAGATG 846
 QY 1683 atacaacagtgaaagagaagaatttcctgtataaagagacccaagaactgaaaaaagc 1742
 DB 845 ATACACAGTGAAGAGAGAGATTTCTGTATAAAGAGACCCAGAGAACTGAAAAAAGC 786
 QY 1743 tccgtttatttcagagagccatcccccacccctcaaatgaaatgagggcttaagtga 1802
 DB 785 TCCTGTTATTTCAGAGGCCATCCCCACCCCTTCAATGAATGAGAGGGCTTAATGAGA 726
 QY 1803 aaatgagtaataaaltgtccatgttaagtacagctgaaagtacataaagaacaaattta 1862
 DB 725 AAATGAGTAATAATGTTCCATGTTAACTACAGCTGAAGATGACATTAAGACGAATTTTA 666
 QY 1863 cacaactaacctctacataaaacaaacaggaatgattctctgacatttcggaacacat 1922
 DB 665 CACAGCTACCTTACATATAAACAACAGGAATGATTTCTTGCATTTCCGACACACAT 606
 QY 1923 taagtgaataaactagaaagaaactaaggttagactacataaataagtaacatacagcat 1982
 DB 605 TAAAGTAATAATGACTTAAAGAACTAAGGATGATCAGCATTAATGTAACATACAGGCAT 546
 QY 1983 ctgtacaatgttctgatttcagtlacagataatagtgtatcacaacaaacagaagtcag 2042
 DB 545 CTGTCAATGTTTCTGATTTTCAGTACAGATTAATAGGATCTTCAACCAAAACAGAACTCAG 486
 QY 2043 atactgtacttttcccaagaagatctcaaggaagaacattatcaattatctac 2102
 DB 485 ATACGTGCTTTTTCACCAAGATTCACAGGAAGAGACCTTCAATCAATATTACTC 426
 QY 2103 atgattctgtctgataaacaataacagttcaagaagacacatactgttcaggaaag 2162
 DB 425 ATGATTCTGTGTGATTAACAATTAACAGTTCACAGAGACCTAATGTTTCAAGCAAG 366

QY 2163 ctccattccatactctctccgtggaagaccatgaatgtgaacttcaagaatagatgt 2222
 DB 365 CTCCAATTCATCTCTCTCTGAGAAACCAATGATGATGATGATGATGATGATGAT 306
 QY 2223 tacctctgttaaaatcacatcgaagaaaglyaaaaataatataatgaagcgaatagaagaa 2282
 DB 305 TACCTTCTGTGTAATAATACATGAAAAAGTGAATAATATTAGAGCAATAGAAAAAGAA 246
 QY 2283 atctggaaccaaagtctgaatctgataaagaactgaattattattacacagaagaacaa 2342
 DB 245 AACTGAAACCAATGCTGAAATTTGATTAATAAGAACTGAATTTATACAGAAAGAAACA 186
 QY 2343 gaattgtgactacacaggtgacagctcttactagactgtgttcagactagtagaagaagaat 2402
 DB 185 GAATTTGTAGTCTACCGGTACAGCTTTTACTGACTTGTTCAGACTAGTGAAGAAAT 126
 QY 2403 cagaatttttggtttcacaagctacacagaagaagatgatalatgaatgttttagata 2462
 DB 125 CAGAAATTTTGGGTTTCACACAGCTACACAGAAAGAGTGATATGCAATGTTTAGATA 66
 QY 2463 ttgggaagaggaagaattcagataatctgttaacagcglttctctgtccctcaact 2522
 DB 65 TTTGGGAAGAGGAATAATTCAGATTAATCTGTAAACAGCGTTTCTGTCCTCAACTT 6
 QY 2523 ctaca 2527
 DB 5 CTACA 1

RESULT 9
 AAH06140
 ID AAH06140 standard; cDNA; 903 BP.
 XX
 AC AAH06140;
 XX
 DT 26-JUN-2001 (first entry)
 XX
 DE Human cDNA clone (5'-primer) SEQ ID NO:2975.
 XX
 KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
 OS Homo sapiens.
 XX
 PN EPI074617-A2.
 XX
 PD 07-FEB-2001.
 XX
 PF 28-JUL-2000; 2000EP-0116126.
 XX
 PR 29-JUL-1999; 99JP-0248036.
 PR 27-AUG-1999; 99JP-0300253.
 PR 11-JAN-2000; 2000JP-0118776.
 PR 02-MAY-2000; 2000JP-0183767.
 PR 09-JUN-2000; 2000JP-0241899.
 XX
 PA (HELI-) HELIX RES INST.
 XX
 PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
 PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
 XX
 DR WPI: 2001-318749/34.
 XX
 PT Primer sets for synthesizing polynucleotides, particularly the 5602
 PT full-length cDNAs defined in the specification, and for the detection
 PT and/or diagnosis of the abnormality of the proteins encoded by the
 PT full-length cDNAs -
 XX
 PS Claim 1: SEQ ID 2975; 2537bp + CD ROM; English.
 XX
 CC The present invention describes primer sets for synthesizing 5602
 CC full-length cDNAs defined in the specification. Where a primer set
 CC comprises: (a) an oligo-dT primer and an oligonucleotide complementary
 CC to the complementary strand of a polynucleotide which comprises one of

CC the 5602 nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides, and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in
CC the specification. The primers are useful for synthesizing polynucleotides,
CC in gene therapy. The primers are useful for synthesizing polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH1628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAH03166 to AAH13632
CC AAH05893 represent human amino acid sequences; and AAH1629 to AAH18742
CC represent oligonucleotides, all of which are used in the exemplification
CC of the present invention.

XX Sequence 903 BP; 326 A; 165 C; 157 G; 242 T; 13 other:

Query Match 26.0%; Score 721.6; DB 22; Length 903;
Best Local Similarity 92.3%; Pred. No. 3.1e-152; Indels 12; Gaps 6;
Matches 820; Conservative 0; Mismatches 56;

1554 tttcttcagaagaatttcagagaaatgatacaacagt-gaagagacgaatttcctgt 1712
1 tttcttcagaagaatttcagagaaatgatacaacagt-gaagagacgaatttcctgt 60
1713 ataaagagacccaggaacatcgaaanaagcttcgtttatttcagagccatcccccac 1772
61 ataaagagacccaggaacatcgaaanaagcttcgtttatttcagagccatcccccac 120
1773 ctcaaatgaattcagagaggttaacgagaaatgaagtaaatgtttcatttgaatga 1832
121 ctcaaatgaattcagagaggttaacgagaaatgaagtaaatgtttcatttgaatga 180
1833 cagctgaagatgacatacagaagaattttacacagctacccctacataaaacaaacag 1892
181 cagctgaagatgacatacagaagaattttacacagctacccctacataaaacaaacag 240
1893 aatgcatcttgaacatttcgagacacacattaaagaaatgaacttgaagaactaagg 1952
241 aatgcatcttgaacatttcgagacacacattaaagaaatgaacttgaagaactaagg 300
1953 tagatcactataaagttaacacacagcattctacatgtttcatttcagttacagata 2012
301 tagatcactataaagttaacacacagcattctacatgtttcatttcagttacagata 360
2013 atagtgatctcacaacaaacagaagtcagatcgtctgttttcacagaaagatctca 2072
361 atagtgatctcacaacaaacagaagtcagatcgtctgttttcacagaaagatctca 420
2073 aggaanaagaccttcacataatttcacatcgtctgttttcacataaagaatgt 2132
421 aggaanaagaccttcacataatttcacatcgtctgttttcacataaagaatgt 480
2133 cacaagaagac 2192
481 cacaagaagac 540
2193 atgagtgtgactcagaagaatgataatgatttacccttcgttlaaataacacgaagtga 2252
541 atgagtgtgactcagaagaatgataatgatttacccttcgttlaaataacacgaagtga 600
2253 aaataaataatgaaacgaagaatgataatgataatgataatgataatgataatgata 2311
601 aaataaataatgaaacgaagaatgataatgataatgataatgataatgataatgata 660
2312 agaacgtgaatttctacacagaagaagaacgaagaatgttgaatgcacggatcattt 2371
661 agaacgtgaatttctacacagaagaagaacgaagaatgtt-cttaccggtacagcttla 719

OY 2372 ctgagctgttccagactagtgagagaatcagaatttttgggttcacaagctacaca 2431
DB 720 ctanactgttccagactagtgagagaatcagaatttttgggttcacaagctacaca 779
OY 2432 gaaa--gagtgatatacgaatgttttagatatttggg-----aagaaggaatcaga 2484
DB 780 gaaaagaatgtgatatgcacatgttttaanataltg9g9gaaagaaatccnaat 839
OY 2485 taatcgttaacagagtttt--ctgcocctcaacttcacatt 2530
DB 840 aatcgttaacagagttttccocgtccctcaacttcacatt 887

RESULT 10

AAAF64883 standard; cDNA: 685 BP.

AAAF64883;

09-APR-2001 (first entry)

Novel human polynucleotide, SEQ ID NO: 639.

Human: cytostatic; gene therapy; colon cancer; prostate cancer;

breast cancer; lung cancer; cancer detection; ss.

Homo sapiens.

MO200102568-A2.

11-JAN-2001.

30-JUN-2000; 2000MO-US18374.

02-JUL-1999; 99US-0142310.

02-JUL-1999; 99US-0142311.

(CHIR) CHIRON CORP.

(HYSE-) HYSEQ INC.

Williams LT, Escobedo J, Inols MA, Garcia PD, Klingner J, Kasam A;

Reinhard C, Randazzo F, Kennedy GC, Pot D, Lamson G, Drmanac R;

Kritenjakov R, Drmanac S, Dickson M, Labat I, Leshkowitz D;

Kita D, Garcia V, Jones LW, Strache-Crain B;

WPI: 2001-091805/10.

Library of polynucleotides for diagnosing a cancerous state of a

mammalian cell and detecting cancer, particularly of the colon or

prostate, comprises 3351 human polynucleotide sequences -

Claim 9: Page 636; 1046pp; English.

The present sequence is one of 3351 sequences in a library of human
polynucleotides. The library is used to detect differentially expressed
genes correlated with a cancerous state of a mammalian cell and can
detect colon, prostate, breast and lung cancer. The library can be used
to produce probes for detection of mRNA and to produce additional copies
of the polynucleotides. The probes can be used for chromosome mapping of
the polynucleotide and for detection of transcription levels. Ribozymes
or antisense oligonucleotides can be generated. The polynucleotides and
their gene products are used as genetic or biochemical markers (e.g. in
blood or tissues) that will detect the earliest changes along the
carcinogenesis pathway and/or monitor the efficacy of therapies and
preventive interventions. The polynucleotides, polypeptides and
antibodies against them can be used in pharmaceutical compositions to
treat the cancers and proliferative disorders such as neoplasia,
dysplasia and hyperplasia.

Sequence 685 BP; 238 A; 127 C; 125 G; 187 T; 8 other:

OS Homo sapiens.
 XX
 PN W0200157278-A2.
 XX
 PD 09-AUG-2001.
 XX
 PE 30-JAN-2001; 2001MO-US00670.
 XX
 PR 04-FEB-2000; 2000US-0180312.
 PR 26-MAR-2000; 2000US-0207456.
 PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX
 PA (MOLE-) MOLECULAR DYNAMICS INC.
 XX
 PI Penn SC; Hanzel DK; Chen W; Rank DR;
 XX
 DR WPI; 2001-488901/53.
 XX
 PT Human genome-derived single exon nucleic acid probes useful for
 XX analyzing gene expression in human cervical epithelial cells -
 XX
 PS Claim 25; SEQ ID NO 6062; 487bp; English.
 XX
 CC The present invention relates to human single exon nucleic acid probes
 CC (SENP). The present sequence is one such probe. The SENPs are derived
 CC from human HeLa cells. The SENPs can be used to produce a single exon
 CC microarray, which can be used for measuring human gene expression in a
 CC sample derived from human cervical epithelial cells. By measuring gene
 CC expression, the probes are therefore useful in grading and/or staging
 CC of diseases of the cervix, notably cervical cancer.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pat_sequences.
 XX
 SQ Sequence 468 BP; 146 A; 92 C; 92 G; 138 T; 0 other;

Query Match 6.6%; Score 184.2; DB 22; Length 468;
 Best Local Similarity 98.4%; Pred. No. 6.5e-32;
 Matches 186; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 736 gcgagttgaagaattctcgcagaagaatcagttatcttattcaataagaagaagc 795
 |||
 DB 274 gcgagttgaagaattctcgcagaagaatcagttatcttattcaataagaagaagc 333
 |||
 OY 796 taatttcacaaaccttgggtgcgaatttcctgtaccgaagtcagaatctgatatc 855
 |||
 DB 334 taatttcacaaaccttgggtgcgaatttcctgtaccgaagtcagaatctgatatc 393
 |||
 OY 856 tgcagaaacccatccatccatccagcagatgatgaagtcatattgaagtcaccagac 915
 |||
 DB 394 tgcagaaacccatccatccatccagcagatgatgaagtcatattgaagtcaccagac 453
 |||
 OY 916 agtgggttt 924
 |||
 DB 454 agtaagttc 462